Amendment to the Specification

Please replace the paragraph on pages 41-42, beginning with the phrase "In order to attempt to isolate" and ending with the word "isolates," with the following amended paragraph:

In order to attempt to isolate a full-length derivative of murine SDF-5, a biotinylated oligonucleotide probe (5'-biotin-ATCGATGCCGTGGCACAGCTGCAGGTTG-3' (SEQ ID NO: 7) was synthesized that represented the reverse complement of nucleotides 18 to 44 of the H14917 sequence. This probe was used in a solution enrichment protocol with 5 separate human full-length cDNA libraries made from the following tissues: adult lung, adult heart, adult kidney, fetal brain, and mammary gland. After the enrichment, about 60,000 colonies from each enriched library were plated onto 10 plates each, and subjected to standard colony hybridization techniques using the same oligonucleotide as a probe after ~~labelling~~ labeling it with polynucleotide kinase and [g-^{32}P]ATP. Due to a technical problem, only 4 plates (24,000 colonies) were plated for the mammary gland library. Only the mammary gland library appeared to contain cDNA clones that hybridized to the probe. Twelve positive clones were picked, grown up and replated. These replated positives were then hybridized once again to the same probe to verify them and to assure their purity. All 12 of the initial positives gave hybridization signals upon secondary hybridization. Four of the candidates were subjected to DNA sequencing. A single clone was chosen (isolate #4) which was in the correct orientation, contained the entire coding sequence for human SDF-5, and whose sequence was verified by comparison with other isolates.

Please replace the paragraph on page 48, beginning with the word "Plasmid" and ending with the word "methods," with the following amended paragraph:

Plasmid pMT2 CXM is obtained by EcoRI digestion of pMT2-VWF, which has been deposited with the American Type Culture Collection (ATCC), Rockville, MD (USA) under accession number ATCC 67122. EcoRI digestion excises the cDNA insert present in pMT2-VWF, yielding pMT2 in linear form which can be ligated and used to transform E. coli HB 101 or DH-5 to ampicillin resistance. Plasmid pMT2 DNA can be prepared by conventional methods. pMT2 CXM is then constructed using loopout/in mutagenesis [Morinaga, et al., Biotechnology 84: 636 (1984). This removes bases 1075 to 1145 relative to the Hind III site near the SV40 origin of replication and enhancer sequences of pMT2. In addition it inserts the following sequence:

5'-PO-CATGGGCAGCTCGAG-3' (SEQ ID NO: 4)

at nucleotide 1145. This sequence contains the recognition site for the restriction endonuclease Xho I. A derivative of pMT2CXM, termed pMT23, contains

recognition sites for the restriction endonucleases PstI, Eco RI, SalI and XhoI. Plasmid pMT2 CXM and pMT23 DNA may be prepared by conventional methods.

Please replace the paragraph on page 49, beginning with the term "pMT21" and ending with the term "XhoI," with the following amended paragraph:

pMT21 is derived from pMT2 through the following two modifications. First, 76 bp of the 5' untranslated region of the DHFR cDNA including a stretch of 19 G residues from G/C tailing for cDNA cloning is deleted. In this process, a XhoI site is inserted to obtain the following sequence immediately upstream from DHFR:

5' -CTGCAGGCGAGCCTGAATTCCTCGAGCCATCATG-3' (SEQ ID NO: 5)
PstI Eco RI XhoI

Please replace the paragraph on page 49, beginning with the phrase "A portion of the EMCV leader" and ending with the term "pEMC2ß1," with the following amended paragraph:

A portion of the EMCV leader is obtained from pMT2-ECAT1 [S.K. Jung, et al, J. Virol 63:1651-1660 (1989)] by digestion with Eco RI and PstI, resulting in a 2752 bp fragment. This fragment is digested with TaqI yielding an Eco RI-TaqI fragment of 508 bp which is purified by electrophoresis on low melting agarose gel. A 68 bp adapter and its complementary strand are synthesized with a 5' TaqI protruding end and a 3' XhoI protruding end which has the following sequence:

5'-
CGAGGTTAAAAAACGTCTAGGCCCCCCGAACCACGGGGACGTGGTTTT
CCTTTGAAA
TaqI

AACACGATTGC-3' (SEQ ID NO: 6)
XhoI

This sequence matches the EMC virus leader sequence from nucleotide 763 to 827. It also changes the ATG at position 10 within the EMC virus leader to an ATT and is followed by a XhoI site. A three way ligation of the pMT21 Eco RI-16hoI fragment, the EMC virus EcoRI-TaqI fragment, and the 68 bp oligonucleotide adapter TaqI-16hoI adapter resulting in the vector pEMC2ß1.